

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

MADISYN S. MILLER, *a minor, by and  
through her parents and natural guardians,*  
ANGELA L. MILLER and DAVID MILLER,  
and ANGELA L. MILLER and DAVID  
MILLER, *in their own right,*

Plaintiffs,

v.

EVENFLO COMPANY, INC.,

Defendant.

CIVIL ACTION NO. 3:09-108

JUDGE KIM R. GIBSON

**MEMORANDUM AND ORDER OF COURT**

**I. SYNOPSIS**

This matter comes before the Court on the Motion to Exclude Expert Testimony (Doc. No. 67) filed by Defendant Evenflo Company, Inc. (“Evenflo”), which Plaintiffs David, Angela, and Madisyn Miller (collectively, “Plaintiffs”) oppose. For the reasons that follow, the Court will **GRANT in part** and **DENY in part** Evenflo’s motion.

**II. JURISDICTION AND VENUE**

The Court has jurisdiction pursuant to 28 U.S.C. §§ 1332(a)(1) and 1441(a). Venue is proper under 28 U.S.C. § 1391(a).

**III. BACKGROUND<sup>1</sup>**

This case arises from a skin reaction (contact dermatitis) Madisyn Miller allegedly suffered as a result of using an Evenflo Big Kid Booster Car Seat (the “Car Seat”). Plaintiffs retained Tim A. Osswald, Ph.D., a purported expert in “polymers/plastics, polymer material

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<sup>1</sup> The Court recently detailed the factual and procedural background of this case and denied the parties’ cross-motions for summary judgment in its Memorandum and Order dated December 15, 2011 (Doc. No. 73). Because familiarity with that Memorandum and Order is presumed, this section is limited to the facts relevant to the disposition of the instant motion.

science, engineering design with polymers, [and] polymer processing and rheology[.]" to identify the chemical content of the Car Seat. (See Doc. No. 72 at 2). Dr. Osswald in turn had a laboratory conduct Fourier Transform Infrared Spectroscopy ("FTIR") and X-Ray Fluorescence ("XRF") testing on the Car Seat components, and after reviewing the results, opined that chemicals and compounds contained in the Car Seat caused Madisyn Miller's injuries. (See Doc. No. 68 at 4).

Challenging Dr. Osswald's expert qualifications, opinions, and the reliability of the methods he employed to reach those opinions, Evenflo filed the instant motion to exclude his testimony pursuant to Federal Rule of Evidence 702. The motion has been fully briefed, (see Doc. Nos. 68 and 72), and is ripe for disposition.

#### **IV. STANDARD OF REVIEW**

Evenflo filed a motion to exclude expert testimony pursuant to Federal Rule of Evidence 702. Under Rule 702, "[a]n expert witness may be permitted to testify regarding 'scientific, technical, or other specialized knowledge' if it 'will assist the trier of fact to understand the evidence or to determine a fact in issue.'" *United States v. Walker*, 657 F.3d 160, 175 (3d Cir. 2011) (citing *United States v. Mornan*, 413 F.3d 372, 380 (3d Cir. 2005) (quoting Rule 702)).<sup>2</sup> In order for an expert witness to be permitted to offer opinion testimony, these three requirements must also be satisfied: (1) his or her testimony is "based upon sufficient facts or data"; (2) the

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<sup>2</sup> Rule 702 provides in its entirety:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

testimony is “the product of reliable principles and methods”; and (3) the witness “applied the principles and methods reliably to the facts of the case.” *Id.* (quoting Rule 702); see also *United States v. Schiff*, 602 F.3d 152, 172 (3d Cir. 2010) (“Rule 702 has three major requirements: (1) the proffered witness must be an expert, *i.e.*, must be qualified; (2) the expert must testify about matters requiring scientific, technical or specialized knowledge [, *i.e.*, reliability]; and (3) the expert’s testimony must assist the trier of fact [, *i.e.*, fit].”) (quoting *Pineda v. Ford Motor Co.*, 520 F.3d 237, 244 (3d Cir. 2008) (alterations in original)). As the United States Court of Appeals for the Third Circuit has further explained, trial judges serve a gatekeeping function and must determine whether these requirements are satisfied before the proposed expert testimony is presented to the jury. See *Schiff*, 602 F.3d at 172 (citing *Pineda*, 520 F.3d at 243); see also *Houston v. Smith*, No. 3:2009-cv-190, 2010 U.S. Dist. LEXIS 118136, \*3 (W.D. Pa. Nov. 5, 2010).

## **V. DISCUSSION**

Evenflo contends that Dr. Osswald’s opinions should be excluded because: (1) he is not qualified to render opinions on issues of medical causation; (2) his conclusions regarding the chemicals present in the Car Seat are not reliable; (3) his opinions do not fit the facts of the case; and (4) certain “inflammatory” opinions are not based on his purported expertise. The Court will address these issues *seriatim*.

### **A. Qualified**

In its motion, Evenflo argues that the Court should not permit Dr. Osswald to testify about the cause of Madisyn Miller’s medical condition because he has “no medical knowledge, training or experience whatsoever[.]” (Doc. No. 68 at 8). Plaintiffs concede that Dr. Osswald is not a medical doctor, but contend that he is qualified to render an opinion as to the cause of

Madisyn Miller's condition based on "his specialized knowledge and experience with polymers, including human reaction from contact with such materials." (Doc. No. 72 at 2-3).

The Third Circuit has "interpreted Rule 702's qualification requirement liberally." *Pineda*, 520 F.3d at 244 (citing *Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003)). Qualification requires that the witness possess specialized expertise, and a broad range of knowledge, skills, and training may serve to qualify a witness as an expert. See *id.*; see also *Houston*, 2010 U.S. Dist. LEXIS 118136 at \*6 (stating that the Third Circuit has "eschewed imposing overly rigorous requirements of expertise and [has] been satisfied with more general qualifications") (citations and quotation marks omitted). Moreover, it is "an abuse of discretion to exclude testimony simply because the trial court does not deem the proposed expert to be the best qualified or because the proposed expert does not have the specialization that the court considers most appropriate." *Pineda*, 520 F.3d at 244 (citing *Holbrook v. Lykes Bros. S.S. Co., Inc.*, 80 F.3d 777, 782 (3d Cir. 1996)).

Instantly, Dr. Osswald possesses specialized expertise on polymers due to his extensive educational and professional experience in the field.<sup>3</sup> Using this expertise and the results of tests conducted on the Car Seat, Dr. Osswald determined that chemicals and compounds—which are known to cause skin irritation and injury—were present in the Car Seat. The Court concludes that Dr. Osswald possesses the broad range of knowledge, skills, and training necessary to qualify as an expert under Rule 702 and render an opinion as to whether the chemicals in the Car Seat did, in fact, cause the skin injuries in the case *sub judice*. Accordingly, the Court will **DENY** Evenflo's motion in this respect.

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<sup>3</sup> The Court need not detail Dr. Osswald's entire twenty-two page curriculum vitae, but it includes graduate degrees in mechanical engineering, nearly thirty years of teaching in the field of polymer science, and numerous scholarly publications. (See Doc. No. 72-1 at 2-24).

## **B. Reliability**

Evenflo next contends that Dr. Osswald's testimony should be excluded because it is not the product of reliable principles and methods. Specifically, Evenflo argues that: (1) the FTIR and XFR testing do not support Dr. Osswald's conclusions regarding the presence of various chemicals; (2) Dr. Osswald failed to conduct tests that would definitively establish which chemicals were present in the Car Seat; and (3) Dr. Osswald's testimony conflicts with the testimony of Plaintiffs' medical expert, Dr. Douglas Kress.

This Court has explained that in evaluating reliability under Rule 702, "the Court must look at methods and procedures to make sure that the basis for the expert's opinion is not subjective belief or unsupported speculation." *Houston*, 2012 U.S. Dist. LEXIS 118136 at \*6 (citations and quotations omitted); see also *Potoski v. Wilkes Univ.*, Civ. No. 3:06-CV-2057, 2010 U.S. Dist. LEXIS 99731, \*11 (M.D. Pa. Sept. 22, 2010) (stating that "[t]he inquiry into methodology is designed to ensure that an expert's opinions are based upon "methods and procedures of science' rather than on subjective belief or unsupported speculation") (quoting *In re Paoli R.R. Yard Pcb Litig.*, 35 F.3d 717, 742 (3d Cir. 1994)). With this understanding, the Court will address Evenflo's specific challenges to the reliability of Dr. Osswald's methods.

### **1. FTIR and XFR Testing**

Evenflo contends that Dr. Osswald's opinions are not reliable because the FTIR<sup>4</sup> and XFR<sup>5</sup> testing do not support them. First, Evenflo argues that FTIR test results are subjective, noting that the technician who performed the analysis stated that "[i]t's a qualitative technique.

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<sup>4</sup> As explained by the technician who conducted the test, FTIR testing "involves the study of molecular vibrations. A continuous beam of electromagnetic radiation is passed through or reflected off the surface of a sample, causing individual molecular bonds and groups of bonds to vibrate at characteristic frequencies and absorb infrared radiation at corresponding frequencies. Because of this, different molecules will generate distinct patterns of absorption called spectra, allowing characterization and identification." (Doc. No. 68 at 10).

<sup>5</sup> "XFR is a materials analysis technique that is used to detect and quantify the elemental composition of solid and liquid samples." (Doc. No. 68 at 13).

There's no absolute." (Doc. No. 68 at 10-11). But Evenflo's argument misses the mark. To survive a motion to exclude pursuant to Rule 702, Plaintiffs need not demonstrate through unequivocal or unassailable methods that certain chemicals were present and caused Madisyn Miller's injuries; rather, they must demonstrate that their expert's opinion is not based on "subjective belief or unsupported speculation." See Houston, 2012 U.S. Dist. LEXIS 118136 at \*6; see also In re TMI Litig., 193 F.3d 613, 705 (3d Cir. 1999) ("The test of admissibility is not whether a particular scientific opinion has the best foundation, or even whether the opinion is supported by the best methodology or unassailable research[.]. . . the test is whether the "particular opinion is based on valid reasoning and reliable methodology.") (quoting *Kannankeril v. Terminix Int'l Inc.*, 128 F.3d 802, 806 (3d Cir. 1997)). Plaintiffs have met this burden because Dr. Osswald's opinion is not based on mere belief or unsupported speculation, it is based on the FTIR test results, an analysis of electromagnetically-induced molecular vibrations. The fact that a qualified expert must interpret the results of this test does not make the test unreliable under Rule 702.<sup>6</sup>

Evenflo next asserts that Dr. Osswald's opinion should be excluded because: (1) the FTIR and XFR tests were conducted by a technician, not by Dr. Osswald personally; and (2) Dr. Osswald improperly relied on the technician's analysis of the FTIR test results. (See Doc. No. 68 at 11-13). Rule 702 does not require a testifying expert to conduct every test upon which he relies, and the Court will not impose such an obligation. See e.g., Astrazeneca AB v. Mylan

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<sup>6</sup> The Court also notes that other district courts have repeatedly recognized FTIR testing as a reliable means of identifying materials. See e.g., St. Anthony's Med. Ctr. v. Nat'l Serv. Indus., No. 4:09CV844 HEA, 2011 U.S. Dist. LEXIS 113480, \*10 (E.D. Mo. Sept. 30, 2011) (concluding that the party seeking to exclude expert testimony "fail[ed] to provide sufficient evidence that would indicate that [FTIR and other tests] are not accepted by the scientific community"); *Dow Corning Corp. v. Weather Shield Mfg.*, No. 09-10429, 2011 U.S. Dist. LEXIS 67244, \*31-32 (E.D. Mich. June 22, 2011) (noting that FTIR testing is "well recognized in the industry" and was properly used to identify silicone as a component of InstantGlaze); *United States v. Diaz*, No. CR 05-0167 WHA, 2006 U.S. Dist. LEXIS 91068, \*47-49 (N.D. Cal. Dec. 6, 2006) (concluding that FTIR testing was the preferred or "better" method for identifying cocaine or marijuana in the laboratory, but that less modern means of identification were still sufficiently reliable).

*Labs., Inc.*, 490 F. Supp. 2d 381, 445 n.33 (S.D.N.Y. 2007) (declining to declare an expert's conclusions unreliable where the expert "did not personally conduct the disintegration and FTIR test"); *Cummins v. Lyle Indus.*, 93 F.3d 362, 369 (7th Cir. 1996) ("Rule 702 is designed to ensure that, when expert witnesses testify in court, they adhere to the same standards of intellectual rigor that are demanded in their professional work. This objective can be accomplished in a number of different ways, including through the review of experimental, statistical, or other scientific data *generated by others in the field.*") (emphasis added, citations omitted). Evenflo's second argument fails because the deposition transcript of Dr. Osswald indicates that he did not merely rely on the technician's opinion; instead, he examined the actual results produced by the testing software to formulate his opinion. (See Doc. No. 68 at 13). As noted above, an expert may properly base his opinion on reliable data produced by others.

## **2. Best Available Test**

Evenflo claims that Dr. Osswald's opinions should also be excluded because FTIR and XFR testing have limitations and Plaintiff failed to use "better" available tests, like Gas Chromatography-Mass Spectrometry ("GCMS"). (See Doc. No. 68 at 19). Even if this Court accepts Evenflo's premise that GCMS is the superior test for material identification, it does not follow that FTIR and XFR are inherently unreliable. See *Diaz*, 2006 U.S. Dist. LEXIS 91068 at \*48 (concluding that "cobalt thiocyanate tests and microcrystalline tests are valid and reliable tests" which have not "been subtracted from the realm of the reliable" methods for identifying drugs after the introduction of the superior FTIR test).

## **3. Conflicting Experts**

In its motion, Evenflo also asserts that Dr. Osswald's opinions should be excluded as unreliable because they are "flatly contradicted" by Plaintiffs' medical expert, Dr. Douglas

Kress. (See Doc. No. 68 at 21). While Evenflo is free to bring such inconsistencies to the attention of the jury, the fact that two different experts can reach different conclusions does not demonstrate that the methods employed by one expert are inherently unreliable.

Therefore, the Court will **DENY** Evenflo's motion to exclude Dr. Osswald's testimony as unreliable.

### C. Fit

Evenflo also contends that Dr. Osswald's testimony should be excluded because it does not fit the facts of the case. (See Doc. No. 68 at 22-27). As this Court recently explained:

Rule 702 requires that the expert testimony must fit the issues in the case. In other words, the expert's testimony must be relevant for the purposes of the case and must assist the trier of fact. . . . The requirement of "fit" depends in part on the proffered connection between the scientific research or test result to be presented and particular disputed factual issues in the case.

*Pritchard v. Dow Agro Sciences*, 705 F. Supp. 2d 471, 492 (W.D. Pa. 2010) (citations and quotation marks omitted); see also *David v. Black & Decker*, 629 F. Supp. 2d 511, 515 (W.D. Pa. 2009) ("Rule 702 require[s] that the expert's testimony fit the facts of the case. Fit requires that the proffered testimony must in fact assist the jury, by providing it with relevant information, necessary to a reasoned decision of the case.") (citations and quotation marks omitted). The Third Circuit further explained this principle by way of example, noting that "animal studies may be methodologically acceptable to show that chemical X increases the risk of cancer in animals, but they may not be methodologically acceptable to show that chemical X increases the risk of cancer in humans." *In re Paoli*, 35 F.3d at 743.

Instantly, the Court concludes that Dr. Osswald's testimony fits the facts of the case. The expert's proposed testimony and the scientific tests upon which it is based are directly connected to the central factual disputes in this case: (1) whether harmful chemicals were present in the Car



Seat; and (2) whether those chemicals actually caused Madisyn Miller's injuries. Moreover, this testimony will not only assist the jury in resolving these factual disputes, it is essential to their understanding and evaluation of these disputes. Thus, the Court will **DENY** Evenflo's motion to exclude Dr. Osswald's testimony for lack of fit.

#### **D. "Inflammatory" Opinions**

In its motion, Evenflo also argues that certain non-scientific opinions<sup>7</sup> are outside the realm of Dr. Osswald's expertise and should be excluded from his expert report. (See Doc. No. 68 at 27-28). Plaintiffs did not address this argument in their responsive brief. (See Doc. No. 72). The Court agrees with Evenflo that these particular opinions are neither based on sufficient facts or data, nor are they the result of reliable principles and methods. Additionally, Dr. Osswald is not qualified as an expert to render these opinions. Thus, the Court will exclude these opinions pursuant to Rule 702.

### **VI. CONCLUSION**

For the above reasons, the Court concludes that Plaintiffs' proffered expert, Dr. Osswald, is sufficiently qualified to testify as to the scientific opinions set forth in his report by virtue of his educational background as well as professional and practical experience. Furthermore, Plaintiffs have demonstrated that his scientific opinions are reliable, fit the facts of the case, and will assist the trier of fact understand the evidence in this case. However, Dr. Osswald's non-scientific opinions, see supra note 7, do not satisfy the requirements of Rule 702. Accordingly, the Court will **GRANT** Evenflo's request to exclude Dr. Osswald's non-scientific opinions, and **DENY** the motion in all other respects. An appropriate order follows.

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<sup>7</sup> Evenflo contends that Dr. Osswald is not qualified to render an opinion regarding: (1) the economic imperatives surrounding the production of the Car Seat; (2) quality control issues related to overseas manufacturing; and (3) Evenflo's failure to produce documents in discovery. (See Doc. No. 68 at 27-28) (quoting Dr. Osswald's report).

MADISYN S. MILLER, *a minor, by and through her parents and natural guardians, ANGELA L. MILLER and DAVID MILLER, and ANGELA L. MILLER and DAVID MILLER, in their own right,*


**v.**

Defendant.

## ORDER

**AND NOW**, this 29<sup>th</sup> day of December 2011, in accordance with the Memorandum, **IT IS HEREBY ORDERED** that Defendant Evenflo Company, Inc.'s Motion to Exclude Expert Testimony (Doc. No. 67) is **GRANTED in part** and **DENIED in part**. Specifically, the Court **GRANTS** Evenflo's request to exclude Dr. Osswald's non-scientific opinions listed in footnote 7 of the Memorandum, and **DENIES** the motion in all other respects.

**BY THE COURT:**

  
KIM R. GIBSON,  
UNITED STATES DISTRICT JUDGE